

## CHAPTER OVERVIEW

### 3: Measuring Matter

The natural sciences begin with **observation**, and this usually involves **numerical measurements** of quantities such as length, volume, density, and temperature. Most of these quantities have **units** of some kind associated with them, and these units must be retained when you use them in calculations. All measuring units can be defined in terms of a very small number of fundamental ones that, through "dimensional analysis", provide insight into their derivation and meaning, and must be understood when converting between different unit systems.

<http://www.chem1.com/acad/webtext/ma...ure/index.html>

[3.1: Units and Dimensions](#)

[3.2: The Meaning of Measure](#)

[3.3: Significant Figures and Rounding off](#)

[3.4: Reliability of a measurement](#)

[3.5: Drawing Conclusions from Data](#)

### Contributors and Attributions

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